

Antimicrobial Resistance Among Human *Campylobacter* Isolates in the United States, 1997-1998

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Antimicrobial agents, while not essential for most persons with *Campylobacter* enteritis, shorten the illness duration and reduce the severity of symptoms if given early in the course of the infection. Erythromycin and fluoroquinolones (e.g. ciprofloxacin) are most commonly used to treat persons with *Campylobacteriosis*. As *Campylobacteriosis* is usually a zoonotic infection, antimicrobial resistance among human *Campylobacter* isolates is likely to be due to the use of these antimicrobial agents in food-producing animals. To monitor the prevalence of resistance among human *Campylobacter* isolates, seven participating state public health laboratories forward the first *Campylobacter* isolate received each week to the Centers for Disease Control and Prevention (CDC) as part of the National Antimicrobial Resistance Monitoring System (NARMS): Enteric Bacteria surveillance system. At CDC, these isolates are tested for antimicrobial susceptibility to chloramphenicol, ciprofloxacin, clindamycin, erythromycin, nalidixic acid, and tetracycline. Identification of *Campylobacter* is performed using dark-field motility, oxidase test, and hippurate test. In 1997-1998, 563 *Campylobacter* isolates were tested; 535 (95%) were *C. jejuni*. Among *C. jejuni* isolates, 250 (47%) were resistant to tetracycline, 97 (18%) to nalidixic acid, 71 (13%) to ciprofloxacin, 24 (5%) to erythromycin, 14 (3%) to clindamycin, and 13 (2%) to chloramphenicol. Three *C. jejuni* isolates were resistant to both ciprofloxacin and erythromycin. We conclude that a high proportion of *Campylobacter jejuni* isolates are resistant to antimicrobial agents commonly used for treatment of *Campylobacteriosis*. The level of resistance to these agents indicates the need for safeguards to be established, and that all stakeholders (public health officials, veterinarians, and the food animal and pharmaceutical industry) work together to preserve the efficacy of these agents for when their use is critical.

Suggested citation:

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